SAT-STA-20130102-00002 S2253

IB2013000003

Intelsat License LLC Galaxy 11

International Bureau

File# SAT-STA-20130102-00002 Call Sign S2253 Grant Date 01/15/13 (or other identifier) Term Dates period of From 01/15/13 To: 30 days

Approved by OMB 3060-0678

Date & Time Filed: Jan 2 2013 4:40:06:003PM File Number: SAT-STA-20130102-00002

Callsign:

\* with conditions

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

Approved:

#### FOR OFFICIAL USE ONLY

#### APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: 30-Day STA to Drift and Operate Galaxy 11 at 55.6 W.L. (S2253)

1. Applicant

Name:

Intelsat License LLC

**Phone Number:** 

202-944-7848

Chief, Satellite Policy Branch

**DBA Name:** 

Fax Number:

202-944-7870

Street:

City:

c/o Intelsat Corporation

E-Mail:

susan.crandall@intelsat.com

3400 International Drive, N.W.

Washington

State:

DC

**Country:** 

**USA** 

Zipcode:

20008

-3006

**Attention:** 

Susan H. Crandall

## Attachment to Grant IBFS File No. SAT-STA-20130102-00002 Call Sign S2253

The application of Intelsat License LLC (Intelsat) for special temporary authority, IBFS File No. SAT-STA-20130102-00002, is GRANTED. Specifically, Intelsat is authorized, for a period of 30 days, commencing on January 15, 2013, to conduct Telemetry, Tracking, and Command (TT&C) operations with the Galaxy 11 space station (Call Sign S2253) necessary to drift the Galaxy 11 space station from its current orbital location of 55.5° W.L. to the 55.6° W.L. orbital location and to maintain the Galaxy 11 space station at that location using the following center frequencies: 14.0005 GHz and 14.4985 GHz (Earth to space), and 11.701 GHz and 11.702 GHz (space to Earth). Intelsat is also authorized to operate Galaxy 11 in the 10.95-11.20 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth), and 13.75-14.50 GHz (Earth-to-space) frequency bands to provide Fixed-Satellite Service, both during Galaxy 11's drift between the 55.5° W.L. and 55.6° W.L. orbital locations and from the 55.6° W.L. orbital location once Galaxy 11 arrives at that location. Operations under this authorization must be in accordance with the technical specifications set forth in Intelsat's application and Federal Communication Commission (Commission) rules not waived herein, and are subject to the following conditions:

- 1. All operations under this authorization must be on an unprotected and non-harmful interference basis, i.e., the Galaxy 11 space station shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating station. In the event of any harmful interference, Intelsat shall cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event.
- 2. Intelsat must operate the Galaxy 11 space station at the 55.6° W.L. orbital location in compliance with all existing or future coordination agreements.
- 3. In connection with the provision of service in any particular country, Intelsat is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
- 4. While at the 55.6° W.L. orbital location, Intelsat must maintain the Galaxy 11 spacecraft with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
- 5. Intelsat's use of the 10.95-11.20 GHz frequency band is subject to Footnote US211 to the Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.
- 6. Intelsat's use of the 10.95-11.20 GHz frequency band is limited to international operations in accordance with footnote NG 104 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG 104, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 25.202(a)(1).
- 7. In the 13.75-14.00 GHz band (Earth-to-space), receiving space stations in the Fixed-Satellite Service shall not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations.
- 8. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US337, any earth station in the United States and its possessions communicating with the Galaxy 11 space station in the 13.75-14.00 GHz band (Earth-to-space) is required to coordinate through National Telecommunications and Information Administration's (NTIA's) Interdepartment Radio Advisory

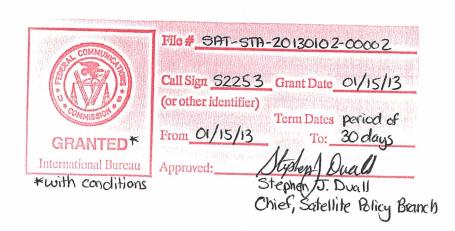
## Attachment to Grant IBFS File No. SAT-STA-20130102-00002 Call Sign S2253

Committee's (IRAC's) Frequency Assignment Subcommittee (FAS) to minimize interference to the National Aeronautics and Space Administration Tracking and Data Relay Satellite System, including manned space flight.

- 9. Operations of any earth station in the United States and its possessions communicating with the Galaxy 11 space station in the 13.75-14.00 GHz band (Earth-to-space) shall comply with footnote US356 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US356, which specifies a mandatory minimum antenna diameter of 4.5 meters and a non-mandatory minimum and maximum equivalent isotropically radiated powers (EIRP). Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 11 space station in the 13.75-14.00 GHz band (Earth-to-space) shall be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits.
- 10. Operations of any earth station in the United States and its possessions communicating with the Galaxy 11 space station in the 13.77-13.78 GHz band (Earth-to-space) shall comply with footnote US357 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US357, which specifies that a required maximum EIRP density of emissions not exceed 71 dBW in any 6 MHz band for communications with a space station in geostationary-satellite orbit. Operations of any earth station located outside the United States and its possessions communicating with the Galaxy 11 space station in the 13.77-13.78 GHz band (Earth-to-space) shall comply with footnote 5.503 to the ITU Radio Regulations, which specifies a required maximum EIRP density of emissions (limit is dependent on antenna diameter) for communications with a space station in geostationary-satellite orbit.
- 11. Operators of earth stations accessing the Galaxy 11 space station in the 13.75-14.00 GHz band are encouraged to cooperate voluntarily with the National Aeronautics and Space Administration (NASA) in order to facilitate continued operation of NASA's Tropical Rainfall Measuring Mission (TRMM) satellite.
- 12. Pursuant to footnote US342 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, services operating in the 14.47-14.50 GHz band shall take all practicable steps to protect the radio astronomy service from harmful interference.
- 13. Intelsat must comply with the power levels specified in Section 25.212 of the Commission's rules, unless it coordinates any operations using power levels exceeding the levels in Section 25.212 with all potentially affected adjacent satellites within 6 degrees orbital separation of the 55.6° W.L. orbital location. Intelsat must inform the Commission of the power levels it has coordinated. In addition, Intelsat must inform all affected earth station operators that Section 25.220 of the Commission's rules applies to operations that exceed the power levels specified in Section 25.212. In no event shall the uplink input power spectral density level of Galaxy 11's digital carriers exceed -45 dBW/Hz into the antenna and the downlink EIRP density of such carriers exceed -21 dBW/Hz for the Ku-band.
- 14. Intelsat's operation of Galaxy 11 at the 55.6° W.L. orbital location in the 10.95-11.20 GHz (space-to-Earth) and 11.70-11.96 GHz (space-to-Earth) frequency bands is subject to the following conditions:

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- (a) Intelsat shall remain a signatory to the Public Services Agreement between Intelsat and the International Telecommunications Satellite Organization (ITSO) that was approved by the ITSO Twenty-fifth Assembly of Parties, as amended.
- (b) No entity shall be considered a successor-in-interest to Intelsat under the ITSO Agreement for licensing purposes unless it has undertaken to perform the obligations of the Public Services Agreement approved by the Twenty-fifth Assembly of Parties, as amended.
- 15. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at Intelsat's own risk.
- 16. Grant of this authorization is without prejudice to any determination that the Commission may make regarding Intelsat's pending applications in IBFS File Nos. SAT-STA-20130102-00001 & SAT-MOD-20121018-00184.
- 17. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.



2. Contact				
ľ	Name:	Susan H. Crandall	Phone Number:	202-944-7848
(	Company:	c/o Intelsat Corporation	Fax Number:	202-944-7870
S	Street:	3400 International Drive, N.W.	E-Mail:	susan.crandall@intelsat.com
(	City:	Washington	State:	DC
(	Country:	USA	Zipcode:	20008 -3006
A	Attention:	Susan H. Crandall	Relationship:	Legal Counsel
application. 3. Referer 4a. Is a fe If Yes, c Governm Other(pl	Please enter once File Num e submitted omplete and mental Entity lease explain	only one.) ber or Submission ID  ith this application  attach FCC Form 159. If No, ind  Noncommercial educational  i:	icate reason for fee exemption	the file number or the IB Submission ID of the related on (see 47 C.F.R.Section 1.1114).
4b. Fee Clas	sification C	CRY – Space Station (Geostationary	y)	
5. Type Re i	uest Station Loca	ation C Extend	d Expiration Date	Other
6. Temporar	y Orbit Locat	tion	7. Re□usted E	xtended Expiration Date

8. Description (If the complete description does	s not appear in this box, please g	to to the end of the form to vie ☐ it in its entirety.)				
Intelsat License LLC herein requests grant of Special Temporary Authority for 30 days, from January 15, 2013 through February 13, 2013, to drift Galaxy 11 (S2253) from 55.5 W.L. to 55.6 W.L. and operate the satellite temporarily at 55.6 W.L. prior to permanently relocating the satellite to 44.8 W.L.						
9. By chec ing Yes, the undersigned certifies that to a denial of Federal benefits that includes FCC 21 U.S.C. Section 862, because of a conviction for 1.2002(b) for the meaning of & inotiparty to the	benefits pursuant to Section 530 or possession or distribution of a	of the Anti–Drug Act of 1988, a controlled substance. See 47 CFR	O No			
10. Name of Person Signing	11. Title	11. Title of Person Signing				
Susan H. Crandall	Asst. G	Asst. General Counsel, Intelsat Corporation				
12. Please supply any need attachments.						
Attachment 1: STA Re ☐uest	Attachment 2:	Attachment 3:				
			*********			
(U.S. Code, Title 18, Section	n 1001), AND/OR RE□OCATIO	NISHABLE BY FINE AND / OR IMPRISONME ON OF ANY STATION AUTHORI□ATION ITURE (U.S. Code, Title 47, Section 503).	NT			

### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for revie ing instructions, searching existing data sources, gathering and maintaining the required data, and completing and revie ing the collection of information. If you have any comments on this burden estimate, or ho in each improve the collection and reduce the burden it causes you, please in the Federal Communications Commission, AMD-PERM, Paper or Reduction Project (3060-0678), Washington, DC 20554. We ill also accept your comments regarding the Paper or Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if  $\Box$ e fail to provide you  $\Box$ ith this notice. This collection has been assigned an OMB control number of 3060–0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104–13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, D.C. 20554



Re: Request for Special Temporary Authority to Drift Galaxy 11 to, and Operate at, 55.6° W.L. (304.4° E.L.); Call Sign: S2253

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests grant of Special Temporary Authority ("STA")<sup>1</sup> for 30 days -- from January 15, 2013 through February 13, 2013 -- to drift Galaxy 11 (S2253) from 55.5° W.L. to 55.6° W.L. and operate the satellite temporarily at 55.6° W.L. prior to permanently relocating the satellite to 44.8° W.L.<sup>2</sup> During the drift to 55.6° W.L. and at that location, Intelsat will continue to operate Galaxy 11 in the 13750 – 14500 MHz, 10950 – 11200 MHz and 11700 – 12200 MHz frequency bands and will provide TT&C using the 14000.5 MHz, 14498.5 MHz, 11701 MHz, and 11702 MHz frequencies. Intelsat seeks this STA in order to ensure safe station-keeping of three Intelsat satellites that will be collocated at the nominal 55.5° W.L. location following the launch of Intelsat 27 at the end of January.

Intelsat currently operates Galaxy 11 and Intelsat 805 at 55.5° W.L.<sup>3</sup> Intelsat 27 is scheduled to be launched on January 30, 2013 and will be operated at 55.5° W.L.<sup>4</sup> In order to ensure the safe station-keeping of the three satellites, Intelsat

<sup>&</sup>lt;sup>1</sup> Intelsat has filed this STA request, an FCC Form 159 and an \$860.00 filing fee electronically via the International Bureau's Filing System.

<sup>&</sup>lt;sup>2</sup> Intelsat has a pending application to modify the license for Galaxy 11 to allow it to be redeployed to 44.8° W.L. in May 2013. *See Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00918, File No. SAT-MOD-20121018-00184 (Dec. 14, 2012) (Public Notice).

<sup>&</sup>lt;sup>3</sup> See Policy Branch Information; Actions Taken, Report No. SAT-00764, File No. SAT-MOD-20101102-00229 (Mar. 11, 2011) (Public Notice) and Applications of Intelsat LLC for Authority to Operate and Further Construct, Launch, and Operate C-Band and Ku-Band Satellites that Form a Global Communications System in Geostationary Orbit, 15 FCC Rcd 15460, 15529 (Appendix C) (2000) (Memorandum Opinion and Order and Authorization), recon. denied, 15 FCC Rcd 25234 (2000) (Order on Reconsideration).

<sup>4</sup> See Policy Branch Information; Actions Taken, Report No. SAT-00904, File No. SAT-LOA-20110610-00105 (Oct. 12, 2012) (Public Notice).

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seeks authority to move Galaxy 11 to 55.6° W.L. until May 2013.<sup>5</sup> As noted above, Galaxy 11 will be drifted to 55.6° W.L. with its communications payload operating. The drift will take approximately one week.

Intelsat will operate Galaxy 11 at 55.6° W.L. in accordance with Intelsat's coordination agreements concerning the nominal 55.5° W.L. location. The only co-frequency satellites located within plus or minus three degrees of 55.6° W.L. are Intelsat satellites.

The drift will be coordinated internally with the operations of these satellites. In the unlikely event that harmful interference occurs, Intelsat will take all necessary steps to eliminate the interference.

Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collisions with large debris or other operational space stations. Galaxy 11 will not be located at the same orbital location as another satellite or at an orbital location that has an overlapping station-keeping volume with another satellite. Further, Intelsat is not aware of any other FCC licensed system, or any other system applied for and under consideration by the FCC, having an overlapping station-keeping volume with Galaxy 11 at 55.6° W.L. Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Galaxy 11 that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

The temporary operation of Galaxy 11 at 55.6° W.L. will help to ensure the safe station-keeping of the three Intelsat satellites at the nominal 55.5° W.L. location and will not impact the Galaxy 11 customers. Accordingly, grant of this STA request is in the public interest.

<sup>&</sup>lt;sup>5</sup> Intelsat is concurrently filing a request to operate Galaxy 11 at 55.6° W.L. for 180 days, which will cover the time period until the satellite is moved to 44.8° W.L.

Ms. Marlene H. Dortch January 2, 2013 Page 3

For the reasons set forth herein, Intelsat respectfully requests that the Commission expeditiously grant this request.

Sincerely,

Susan H. Crandall

Assistant General Counsel

Intelsat Corporation

Cc: Stephen Duall Jay Whaley Cindy Spiers